ABSTRACT

Described are methods for stabilizing radionuclide-containing compositions against degradation caused by free radicals generated from the radionuclide. Iodide ions stabilize the radionuclide-containing compositions by acting as scavengers to generated free radicals, thus, preventing or lessening degradation therefrom. Among the preferred radionuclide-containing compositions to be stabilized are complexes of a complexing agent with a radionuclide complexed therewith, such as a diagnostic agent having a specific binding peptide linked to a metal ion-complexing moiety which is complexed with a radionuclide, such as technetium-99m (Tc-99m). Also included in the invention are compositions of radionuclide-containing compounds or complexes with iodide or an iodide ion-providing component, compositions of compounds or complexing agents that will be associated with a radionuclide and kits containing any combination of radionuclides, radionuclide generators, complexing agents or compounds which are associated with or will be associated with radionuclides and iodide or iodide-providing components.